

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: EMS 2614

COURSE TITLE: Paramedic Module IV, Trauma

PREREQUISITE(S): EMS 1119, EMS 2611, EMS 1401 and BSC 2020C

COREQUISITE(S): None

CREDIT HOURS: 2

CONTACT HOURS/WEEK: 2

CONTACT HOUR BREAKDOWN:

Lecture/Discussion: 2

Laboratory:

Other _____:

FACULTY WORKLOAD POINTS: 2

STANDARDIZED CLASS SIZE ALLOCATION: 24

CATALOG COURSE DESCRIPTION:

This course is module 4 in a sequence of instruction for EMT-paramedic. Instruction includes mechanism of injury analysis, trauma resuscitation, and advanced trauma management.

SUGGESTED TEXT(S): Paramedic Care: Principles and Practice Volume 4, Brady Publishing, Pre-Hospital Trauma Life Support Text

IMPLEMENTATION DATE: January, 2001

REVIEW OR MODIFICATION DATE: Fall Term, 2002 (20031)
 Fall Term, 2003 (20041)
 Summer Term, 2005 (20053)
 Fall Term, 2008 (20091) - Outline Review 2007

COURSE TOPICS	CONTACT HOURS <u>PER TOPIC</u>
I. Trauma and Mechanisms of Injury	6
A. Kinematics B. Blunt Trauma C. Penetrating Trauma	
II. Hemorrhage and Shock	8
A. Defining Shock B. Tissue Oxygenation C. Components of Blood D. Classifications of Shock E. Stages of Shock	
III. Specific Injuries	10
A. Burns B. Head and Facial Trauma C. Spinal Trauma D. Thoracic Trauma E. Abdominal Trauma	
IV. Musculoskeletal Trauma	6
A. Upper Extremity Injuries B. Lower Extremity Injuries	

PROGRAM TITLE: Emergency Medical Services - Associate's Degree

COURSE TITLE: Paramedic Module IV, Trauma

CIP NUMBER: 0317.020601

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain BLS skills of basic rescuer or higher.
- 06.04 Demonstrate basic understanding of first aid and emergency care.
- 06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 DEMONSTRATE KNOWLEDGE OF THE PARAMEDIC PROFESSION--The student will be able to:

- 12.01 Define the role and responsibilities of the paramedic.
- 12.02 Describe and contrast the differences between the various levels of training, from EMT to Paramedic.
- 12.03 List current state requirements for paramedic certification and recertification.
- 12.04 Discuss Chapter 401, Florida Statutes, and Chapter 10D-66, Florida Administrative Code.
- 12.05 State the major purposes of a national association, a national registry, and professional journals.
- 12.06 State the benefits of paramedics teaching in their community.
- 12.07 Define continuing education, certification, licensure and registration.

16.0 DEMONSTRATE RESCUE TECHNIQUES AND EXTRICATION--The student will be able to:

- 16.01 Identify possible hazards when given a description of a scene and describe the procedures for handling the hazards.
- 16.02 Identify and/or describe the equipment used and the techniques necessary for gaining access to, packaging, extricating and transporting patients trapped within a vehicle or other confinement.
- 16.03 Describe the integration of patient care into the process of patient disentanglement and rescue.
- 16.04 Identify proper response in the presence of hazardous materials and name proper hazardous materials authorities that should be notified.
- 16.05 Manage scene and safe patient access.
- 16.06 Discuss removal and transport of the patient from the scene.
- 16.07 Demonstrate the procedures and operation of equipment used for gaining access to, packaging, extricating, and transporting patients trapped or confined in a vehicle or other type of entrapment.
- 16.08 Demonstrate techniques for lifting and handling patients with and without spine injuries and/or other special injury problems utilizing the specialized equipment found on a rescue vehicle.

17.0 DESCRIBE MAJOR INCIDENT RESPONSE--The student will be able to:

- 17.01 Define mass casualty incident (MCI) and when it should be declared.
- 17.02 Describe the "pre-planning phase" and "response planning".
- 17.03 Discuss MCI communications.

LIST PERFORMANCE STANDARD ADDRESSED: (Continued)

NUMBER(S): TITLES(S):

- 17.04 Describe the components of special resources.
- 17.05 Describe the function of "scene command", "scene triage", and the "transferring command function".
- 17.06 Describe section and staging management and a system for patient identification.
- 17.07 Discuss on-scene medical control.

18.0 DESCRIBE AND MANAGE CAUSES OF STRESS--The student will be able to:

- 18.01 Define stress and discuss its causes and phases.
- 18.02 Describe common physiologic responses to stress and its effects.
- 18.03 Describe factors that determine whether anxiety is a positive or negative response.
- 18.04 Describe behavior that is a manifestation of stress in patients, patients' families and the paramedic.
- 18.05 Describe common causes of job-related stress and various techniques of paramedic stress management.
- 18.06 Describe the stages of the grief process and common needs of the patient, the family and the paramedic in dealing with death and dying.
- 18.07 Describe common management techniques used by the paramedic when a patient is dead or dying.
- 18.08 Discuss areas of controversy in prehospital care involving death and dying.

19.0 USE MEDICAL TERMS SPECIFIC TO EMS--The student will be able to:

- 19.01 Read, write, use and respond correctly to terms specific to EMS.
- 19.02 Read, write, use and respond correctly to abbreviations specific to EMS.

20.0 DEMONSTRATE GENERAL PATIENT ASSESSMENT AND INITIAL MANAGEMENT—The student will be able to:

- 20.01 Establish priorities of care based on threat to life and describe the treatment modalities for the management of these conditions.
- 20.02 Describe the primary and secondary survey.
- 20.03 Describe the anatomy, physiology and pathophysiology of the airway and lungs and their anatomical structures.
- 20.04 Describe the use of adjuncts in airway management.
- 20.05 Describe advanced methods of airway management.
- 20.06 Explain the significance of protection of the cervical spine in airway management.
- 20.07 Explain pulmonary ventilation and gas exchange across the alveolar-capillary membrane.
- 20.08 Describe the pathophysiology of open and closed pulmonary injuries.
- 20.09 Discuss the techniques for evaluating effectiveness of ventilation.
- 20.10 Describe the anatomy and physiology of the heart and the cardiovascular system.
- 20.11 Describe the pathophysiology of cardiac arrest.
- 20.12 Describe the mechanisms of evaluating the effectiveness of perfusion.
- 20.13 Describe hemorrhage control and its benefits and complications.
- 20.14 Assess neurological status.
- 20.15 Discuss the pathophysiology of shock.
- 20.16 Define the trauma score and its usefulness.
- 20.17 Demonstrate obtaining a relevant patient medical history.
- 20.18 Describe how a patient is packaged and stabilized for transportation to the hospital.

LIST PERFORMANCE STANDARD ADDRESSED: (Continued)

NUMBER(S): TITLES(S):

- 20.19 Discuss procedures for hospital selection, the transportation phase, and patient monitoring enroute to the hospital.
- 20.20 Perform a rapid assessment.
- 20.21 Perform a secondary survey.
- 20.22 Demonstrate cardiopulmonary resuscitation.

22.0 ASSESS AND MANAGE SHOCK--The student will be able to:

- 22.01 Identify and describe the causes, pathophysiology signs, symptoms, clinical manifestations, and management of shock.
- 22.02 Describe fluids, fluid transport, and fluid and electrolyte imbalances.
- 22.03 Discuss resuscitation of the shock patient.
- 22.04 Discuss the hemodynamics of the cardiovascular system.
- 22.05 Discuss differences in IV fluid composition and their implications in fluid administration.
- 22.06 Describe baroreceptors and their affect on blood pressure and perfusion.
- 22.07 Describe compensated and uncompensated shock.
- 22.08 Discuss evaluation of the patient's perfusion status.
- 22.09 Define and discuss acid-base balance.
- 22.10 Describe indications and contraindications of the pneumatic anti-shock garment.
- 22.11 Discuss the methods of fluid replacement and the advantages and disadvantages of each.
- 22.12 Demonstrate, in order of priority, the steps in shock resuscitation.
- 22.13 Demonstrate the use of the pneumatic anti-shock garment.
- 22.14 Demonstrate proper technique of setting up intravenous fluids for administration.
- 22.15 Demonstrate proper technique of peripheral and external jugular venous cannulation on the adult, child and infant patient.
- 22.16 Demonstrate proper techniques for trouble-shooting an intravenous infusion.
- 22.17 Calculate fluid administration rates for intravenous fluids utilizing a variety of administration sets.

24.0 ASSESS AND MANAGE TRAUMA EMERGENCIES--The student will be able to:

- 24.01 Describe the general care and transportation of the trauma patient.
- 24.02 Describe the priorities of trauma care and triage with multiple patients.
- 24.03 Describe the anatomy, physiology, pathophysiology assessment, and management of trauma to all regions of the human body.
- 24.04 Describe and demonstrate methods of hemorrhage control.
- 24.05 Describe neurological examination, assessment, pathophysiology, and management.
- 24.06 Describe rapid on-scene management of the trauma patient.
- 24.07 Describe the components of a complete prehospital history and the significance of each.
- 24.08 Describe various types of splints that are used for immobilization of fractures and dislocations, their use and the advantages and disadvantages of each.
- 24.09 Describe the short and long backboard, the various state-of-the-art substitutes available, and their specific uses.
- 24.10 Describe various systems designed for scoring the severity of injuries to the trauma patient and contrast with them with the Florida Trauma Scorecard as identified in Chapter 10D-66, F.A.C.
- 24.11 Identify and describe the use of a trauma score in quantifying patient condition.

LIST PERFORMANCE STANDARD ADDRESSED: (Continued)

NUMBER(S): TITLES(S):

- 24.12 Demonstrate advanced methods of airway management and ventilation in the trauma patient.
- 24.13 Demonstrate decompression of a tension pneumothorax.
- 24.14 Demonstrate application of pneumatic anti-shock garment (MAST).
- 24.15 Describe and demonstrate physical examination of the trauma patient.
- 24.16 Demonstrate a neurological examination as performed on the trauma patient.
- 24.17 Demonstrate immobilization of the cervical spine.
- 24.18 Demonstrate splinting techniques.



NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

Section 1	
COURSE PREFIX AND NUMBER: <u>EMS 2614</u>	SEMESTER CREDIT HOURS: <u>2</u>
COURSE TITLE: <u>Paramedic Module 4, Trauma</u>	

Section 2
TYPE OF COURSE: (Click on the box to check all that apply)

<input type="checkbox"/> AA Elective	<input checked="" type="checkbox"/> AS Required Professional Course	<input type="checkbox"/> College Prep
<input type="checkbox"/> AS Professional Elective	<input type="checkbox"/> AAS Required Professional Course	<input checked="" type="checkbox"/> Technical Certificate
<input type="checkbox"/> Other _____	<input type="checkbox"/> PSAV	<input type="checkbox"/> Apprenticeship
<input type="checkbox"/> General Education: (For General Education courses, you must also complete Section 3 and Section 7)		

Section 3 (If applicable)
INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

<input type="checkbox"/> Communications	<input type="checkbox"/> Social & Behavioral Sciences	<input type="checkbox"/> Mathematics
<input type="checkbox"/> Natural Sciences	<input type="checkbox"/> Humanities	

Section 4
INTELLECTUAL COMPETENCIES:

<input checked="" type="checkbox"/> Reading	<input checked="" type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Critical Analysis	<input type="checkbox"/> Quantitative Skills	<input type="checkbox"/> Scientific Method of Inquiry
<input checked="" type="checkbox"/> Writing	<input checked="" type="checkbox"/> Listening	<input checked="" type="checkbox"/> Information Literacy	<input checked="" type="checkbox"/> Ethical Judgment	<input checked="" type="checkbox"/> Working Collaboratively

Section 5	
LEARNING OUTCOMES	METHOD OF ASSESSMENT
• Demonstrate ability to properly assess trauma patients	Scenraios, exams and quizzes
• Demonstrate ability to properly assess vital signs	Scenrarios, exams and quizzes
• Demonstrate ability to care for patients with shock	Scenarios, exams and quizzes
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Section 6
 Name of Person Completing This Form: Marcie Heatherington Date: 10/30/2007